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TO WHOM IT MAY CONCERN:

I support Jay Fleming in his efforts to improve the safety of smoke detectors (also called “smoke alarms”) by requiring that, for normal residential protection, only photoelectric or dual-sensor detectors be used. There is overwhelming research to support this position. Chief Fleming has outstanding credentials in this field and he has extensively reviewed and analyzed much of the research. These efforts of his have greatly helped increase our level of understanding of this important topic.

Furthermore, as a fire science expert, not affiliated with any smoke detector manufacturing interests, I would like to clearly point out that Chief Fleming’s research in this area has much greater credibility than the posture of NFPA 72 Committee members, which is a group largely dominated by smoke detector manufacturing and related commercial interests.

The use by NFPA 72 of the document “ISO 13571” is inappropriate, since the latter’s recommendation is grossly flawed. ISO 13571 first (correctly) states that “It is estimated that occupants literally cannot see their hands in front of their faces...when confronted with a fuel mass loss concentration of $20 \text{ g}\cdot\text{m}^{-3}$ ” but then totally unreasonably concludes that it is acceptable for occupants to be confronted with an escape situation where the smoke obscuration is so bad that they “cannot see their hands in front of their face.”

I have served as a fire safety researcher at the National Institute of Standards and Technology for over a 16-year period, during which time I invented one of the most widely-used laboratory instruments for measuring smoke obscuration and have written numerous research papers and reports dealing with smoke obscuration hazards. I hold the highest membership rank, Fellow, in the Society of Fire Protection Engineers and have been the first-ever individual to be awarded a Ph.D. degree in Fire Protection Engineering.

Sincerely yours,

